

WHAT IS CLAIMED IS:

1. A breather structure for an overhead-valve internal combustion engine in which a cylinder bore is formed in a cylinder block coupled to a crankcase which rotatably supports a crankshaft, a camshaft housing chamber which houses a camshaft for performing an open/close driving of an intake valve and an exhaust valve which are arranged in a cylinder head is formed between the cylinder head which is coupled to the cylinder block, a driving force transmission chamber which is arranged at the side of the cylinder bore is formed in the crankcase, the cylinder block and the cylinder head such that a driving force transmission member which transmits a rotational driving force of the crankshaft to the camshaft is housed in the driving force transmission chamber, and a breather chamber which is arranged below the camshaft housing chamber and at the side of the cylinder bore and the driving force transmission chamber is formed such that the breather chamber extends between the cylinder block and the crankcase comprising:

a breather inlet passage including an upper end thereof in communication with an inside of the camshaft housing chamber and a lower end thereof in communication with the breather chamber at a position corresponding to a mating face between the cylinder block and the crankcase is arranged in the cylinder block such that the breather inlet passage extends vertically; and

an oil discharge hole being in communication with a lower portion of the inside of the breather chamber and arranged in the crankcase.

2. The breather structure of an overhead-valve internal combustion engine according to claim 1, wherein a projecting portion which projects upwardly from a lower face of the camshaft housing chamber is integrally formed on an upper portion of the cylinder block, and the upper end of the breather inlet passage opens at an upper end of the projecting portion.

3. The breather structure of an overhead-valve internal combustion engine according to claim 1, wherein a cylinder gasket for partitioning the breather chamber into a lower chamber at the crankcase side and an upper chamber at the cylinder block side, allows the flow of a blowby gas from the lower chamber to the upper chamber, and is capable of separating a vapor-liquid mixture from the blowby gas is inserted between the crankcase and the cylinder block, and a communication hole which allows a lower end of the breather inlet passage to communicate with the lower chamber is formed in the cylinder gasket.

4. The breather structure of an overhead-valve internal combustion engine according to claim 2, wherein a cylinder gasket for partitioning the breather chamber into a lower chamber at the crankcase side and an upper chamber at the cylinder block side, allows the flow of a blowby gas from the lower chamber to the upper chamber, and is capable of separating a vapor-liquid mixture from the blowby gas is inserted

between the crankcase and the cylinder block, and a communication hole which allows a lower end of the breather inlet passage to communicate with the lower chamber is formed in the cylinder gasket.

5. The breather structure of an overhead-valve internal combustion engine according to claim 3, wherein a plurality of small holes for enabling the lower chamber and the upper chamber to communicate with each other are formed in the cylinder gasket.

6. The breather structure of an overhead-valve internal combustion engine according to claim 4, wherein a plurality of small holes for enabling the lower chamber and the upper chamber to communicate with each other are formed in the cylinder gasket.

7. The breather structure of an overhead-valve internal combustion engine according to claim 1, wherein an oil discharge passage for communicating with the oil discharge hole has a lower end thereof in communication with an inside of the crankcase below an oil surface in the inside of the crankcase.

8. The breather structure of an overhead-valve internal combustion engine according to claim 2, wherein an oil discharge passage for communicating with the oil discharge hole has a lower end thereof in communication with an inside of the crankcase below an oil surface in the inside of the crankcase.

9. The breather structure of an overhead-valve internal combustion engine according to claim 3, wherein an oil discharge passage for communicating with the oil discharge hole has a lower end thereof in communication with an inside of the crankcase below an oil surface in the inside of the crankcase.

10. The breather structure of an overhead-valve internal combustion engine according to claim 4, wherein an oil discharge passage for communicating with the oil discharge hole has a lower end thereof in communication with an inside of the crankcase below an oil surface in the inside of the crankcase.

11. The breather structure of an overhead-valve internal combustion engine according to claim 5, wherein an oil discharge passage for communicating with the oil discharge hole has a lower end thereof in communication with an inside of the crankcase below an oil surface in the inside of the crankcase.

12. The breather structure of an overhead-valve internal combustion engine according to claim 6, wherein an oil discharge passage for communicating with the oil discharge hole has a lower end thereof in communication with an inside of the crankcase below an oil surface in the inside of the crankcase.

13. A breather structure adapted to be used with an overhead-valve internal combustion engine in which a cylinder bore in a cylinder block comprising:

a breather chamber arranged below a camshaft housing chamber and at a side of the cylinder bore and a driving force transmission chamber, said breather chamber extending between the cylinder block and a crankcase;

a breather inlet passage including an upper end thereof in communication with an inside of a camshaft housing chamber and a lower end thereof in communication with the breather chamber at a position corresponding to a mating face between the cylinder block and the crankcase, said breather inlet passage being arranged in the cylinder block such that the breather inlet passage extends vertically; and

an oil discharge hole being in communication with a lower portion of the inside of the breather chamber and arranged in the crankcase.

14. The breather structure adapted to be used with an overhead-valve internal combustion engine according to claim 13, wherein a projecting portion which projects upwardly from a lower face of the camshaft housing chamber is integrally formed on an upper portion of the cylinder block, and the upper end of the breather inlet passage opens at an upper end of the projecting portion.

15. The breather structure adapted to be used with an overhead-valve internal combustion engine according to claim 13, wherein a cylinder gasket for partitioning the breather chamber into a lower chamber at the crankcase side and an upper chamber at the cylinder block side, allows the flow of a blowby gas from the lower chamber to the upper chamber, and is capable of separating a vapor-liquid mixture

from the blowby gas is inserted between the crankcase and the cylinder block, and a communication hole which allows a lower end of the breather inlet passage to communicate with the lower chamber is formed in the cylinder gasket.

16. The breather structure adapted to be used with an overhead-valve internal combustion engine according to claim 14, wherein a cylinder gasket for partitioning the breather chamber into a lower chamber at the crankcase side and an upper chamber at the cylinder block side, allows the flow of a blowby gas from the lower chamber to the upper chamber, and is capable of separating a vapor-liquid mixture from the blowby gas is inserted between the crankcase and the cylinder block, and a communication hole which allows a lower end of the breather inlet passage to communicate with the lower chamber is formed in the cylinder gasket.

17. The breather structure adapted to be used with an overhead-valve internal combustion engine according to claim 15, wherein a plurality of small holes for enabling the lower chamber and the upper chamber to communicate with each other are formed in the cylinder gasket.

18. The breather structure adapted to be used with an overhead-valve internal combustion engine according to claim 16, wherein a plurality of small holes for enabling the lower chamber and the upper chamber to communicate with each other are formed in the cylinder gasket.

19. The breather structure adapted to be used with an overhead-valve internal combustion engine according to claim 13, wherein an oil discharge passage for communicating with the oil discharge hole has a lower end thereof in communication with an inside of the crankcase below an oil surface in the inside of the crankcase.

20. The breather structure adapted to be used with an overhead-valve internal combustion engine according to claim 14, wherein an oil discharge passage for communicating with the oil discharge hole has a lower end thereof in communication with an inside of the crankcase below an oil surface in the inside of the crankcase.